



X-GUARD™

Fiber-Optic Towed Decoy

Shields Fighter Aircraft from Advanced Air Defense Systems

In today's increasingly complex battlefields, fighter aircraft crews need effective protection against surface-to-air and air-to-air missiles. In addition to improved aircraft detection capabilities, there is a growing need for enhanced active EW defense.

RAFAEL's X-GUARD™, a cutting-edge, reusable towed decoy, is the solution for this critical operational need.

Integrated with the fighter aircraft's EW suite, the towed decoy provides high-value active protection that defeats the most sophisticated radars, dramatically increasing aircraft survivability.

Benefits

- Increases aircraft survivability and mission success probability
- Minimal limitation on aircraft maneuverability while deployed
- Provides full sphere defense coverage
- Fast deployment, low-drag and lightweight
- Reusable; reeled-in after mission completion
- Cost-effective; low Life Cycle Cost (LCC)
- Simple operation by the pilot
- High reliability and safety operation during all flight phases



Cutting-Edge, Adaptable and Cost-Effective

Towed behind the fighter aircraft, the lightweight X-GUARD with a high ERP solid state antenna array defeats advanced tracking radars, including Monopulse and Lobe-On-Receive-Only (LORO) radar types.

X-GUARD can be deployed – either when the aircraft approaches a threatened area or upon detection of an imminent threat – to counter radar guided air-to-air and surface-to-air missiles during operational missions.

Deployable and retractable in flight using an advanced reel-out/reel-in mechanism, X-GUARD maintains both electrical and fiber-optic continuity throughout the flight. Upon mission completion, the decoy is reeled in to its stowed mode position inside the pod on the aircraft.

The system is certified for use within the fighter aircraft operational flight envelope, at low and high altitude, and subsonic to supersonic velocity.

X-Guard is integrated with the aircraft and its onboard EW system, using standard protocols. The X-GUARD pod and decoy are carried on air-to-air or air-to-ground weapon stations.

Main Capabilities

- High Effective Radiated Power (ERP), solid state active antenna array with full sphere coverage
- Maintains both electrical and fiber-optic continuity throughout flight
- Advanced reel-out/reel-in mechanism
- Easily adapted to the aircraft; standard process for integrating with aircraft's embedded EW system
- Certified to fighter aircraft flight envelope
- Fully operational and proven on fighter aircraft

Technical Specifications

Weight	Pod & decoy: 65kg
Flight Envelope (deployed)	Alt: up to 50,000 feet Velocity: up to 1.6M Acceleration: 7g
EW System Communications	Fiber-optic wire & high voltage power supply



AIR & C4ISR DIVISION

Tel: +(972)73-336-8503
Fax: +(972)73-336-6257

HQ Tel: +(972)73-335-4714
Fax: +(972)73-335-4657

Email: Intl-mkt@rafael.co.il www.rafael.co.il

X-GUARD™ is a trademark of RAFAEL Advanced Defense Systems Ltd.
UNC. 66644/1221/32 /ENG/Graphic Design Dep/410